

**REMARKS**

The entry of the foregoing, reexamination, and reconsideration of the present application, as amended, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested in light of the following remarks.

Applicant thanks the Examiner for considering the rejoinder of Group II with Group I in the event that compounds of Group I are allowable.

The specification has been amended to correct an error in the chemical structure of the compound of formula (3) shown on page 7. In particular, [0018] of the specification has been amended. The same type of correction to formula (3) has been made in Claim 4. The omitted C=O is a requisite element of the compound of formula (3) so that the structure of the compound of formula (3) is consistent with the generic structure described by formula (I).

No new matter has been added.

Claims 1-23 are pending in the present application. Claims 5-22 stand withdrawn from further consideration. Claims 2-3 have been canceled. Claims 1, 4, and 23 have been amended. Applicant notes that the original claims of the subject application included text (i.e., variables "m" and "n") which were originally presented with underscoring. Thus, the recitation of variables "m" and "n" in their underscored form do not represent current amendments as presented.

Claim 1 has been amended. Support for the amendment to Claim 1 is found throughout the specification. The compounds described under subparagraphs "(i)" and "(ii)" within Claim 1, as amended, represent subsets of compounds that are described by formulas (I) and (II), and these subsets do not include species cited in *Richard*. In particular, the support for subparagraph "(i)" is found under [0016] at page 5 of the specification as well as in original Claim 2. The support for subparagraph "(ii)" is found under [0017] at page 5 of

the specification as well as in original Claim 3. In addition, the compound described under subparagraph "(iii)" as "the compound of formula (1)" has been previously presented as the compound of Claim 23 and is also presented on page 6 of the specification and in original Claim 4. Furthermore, the compound described under subparagraph "(iv)" as "the compound of formula (3)" has been previously presented as one of the listed compounds in Claim 4 and is also presented on page 7 of the specification. Applicant notes that the phrase "with the proviso that: (i) when  $n=1$  and  $R_4$  denotes hydrogen, then  $m$  is equal to 0, and" has been removed and replaced by subparagraphs (iii) and (iv) directed to the compounds of formula (1) and (3), respectively. Thus, no new matter has been added.

Rejections under 35 U.S.C. § 103(a)

Claims 1-4 and 23 stand rejected under 35 U.S.C. §103(a) in view of *Richard et al.* ("*Richard*") (US Pat. No. 5,236,698). The Office Action asserts that it would have been obvious to make the claimed compounds based on the teachings of *Richard*, especially in Examples 2 and 3, and to expect the resulting compounds to possess equivalent properties or uses taught by *Richard*.

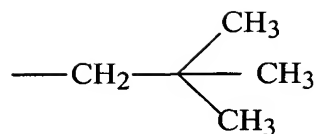
Applicant traverses the rejection under 35 U.S.C. §103(a) and submits that the claimed compounds of the present application are neither equivalent to nor obvious from the compounds taught by *Richard*. The claimed compounds are directed to 3 para aminobenzalmalonate substituents whereas *Richard's* compounds generally comprise benzalmalonate substituents. Applicant asserts that *Richard* does not provide the motivation to modify the prior art compounds to result in the claimed compounds having improved photostability properties not possessed by *Richard's* compounds. Applicant provides in the specification the results of comparative tests between an example of a claimed compound of

formula (1) of Claim 1, which is 2,4,6-tris(dineopentyl 4'-aminobenzalmalonate)-s-triazine and a structurally related compound described in *Richard*, which is 2,4,6-tris-(diisobutyl 4'-aminobenzalmalonate)-s-triazine, further described below. Because the claimed compounds demonstrate unexpected improvement in photostability, Applicant asserts that the claimed compounds of Claim 1 defined by formula (I) are not obvious in view of the compounds described in *Richard*.

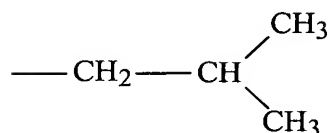
The specification of the present application provides the results of a comparative photostability test showing that Example 1 of the present application demonstrated surprisingly higher level of photostability, i.e., an average rate of loss due to irradiation = 3-5 % for compound 2,4,6-tris-(dineopentyl 4' aminobenzalmalonate)-s-triazine, when compared to *Richard's* compound exhibiting an average rate of loss due to irradiation = 9-11 % for 2,4,6-tris-(diisobutyl 4'-aminobenzalmalonate)-s-triazine; see paragraph [0089] starting on page 27 and including the table entitled "Photostability Results" on page 29 of the specification. Thus, Applicant's representative compound exhibits up to three times more photostability than *Richard's* compound.

In Example 1 of the present application, the compound 2,4,6-tris-(dineopentyl 4' aminobenzalmalonate)-s-triazine, as noted above, was tested in a comparative photostability test against the compound of Example 1 of *Richard*, which is 2,4,6-tris-(diisobutyl 4'-aminobenzalmalonate)-s-triazine, which is also referred to as "Compound (prior art)" in the present specification. The compound 2,4,6-tris-(dineopentyl 4' aminobenzalmalonate)-s-triazine has a neopentyl group as the R substituent defined by formula (II) as shown below as (a). The compound described in Example 1 of *Richard*, that is, 2,4,6-tris-(diisobutyl 4'-aminobenzalmalonate)-s-triazine has an isobutyl group as the R substituent as shown below as (b) for a structural comparison:

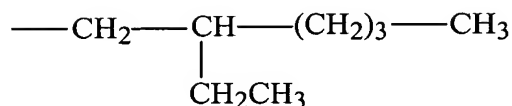
(a)



(b)



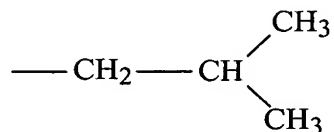
(c)



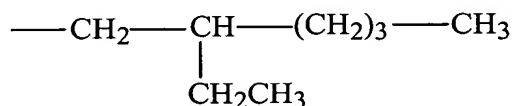
The R substituent shown in (c) is the 2-ethylhexyl group of the compound 2,4,6-tris-(di(2-ethylhexyl) 4'-aminobenzalmalonate)-s-triazine described in Example 3 of *Richard*, specifically cited in the Office Action. Applicant points out that because the structural similarity between compounds having substituents (a) and (b) is greater than the structural similarity between compounds having substituents (a) and (c), the compound of Example 1 of *Richard* is a better reference candidate than the compound of Example 3 of *Richard* for comparing properties. Applicant has made the most relevant comparison.

Claim 1 excludes the species cited in *Richard*. In Example 1, *Richard* describes the compound 2,4,6-tris-(diisobutyl 4'-aminobenzalmalonate)-s-triazine, which has an isobutyl

group as the R substituent in Claim 1; R would have formula (II) in which  $n=0$ ,  $m=1$ ,  $R_5 = H$ ,  $R_3 = H$ , and  $R_1 = R_2 = CH_3$ ; or alternatively,  $n=1$ ,  $m=0$ ,  $R_4 = H$ ,  $R_3 = H$ , and  $R_1 = R_2 = CH_3$  (which are outside the scope of the instant Claim 1), as shown below:



In Example 3, *Richard* discloses the compound 2,4,6-tris-(di(2-ethylhexyl) 4'-aminobenzalmalonate)-s-triazine, which has a 2-ethylhexyl group as the R substituent; R would have formula (II) of Claim 1, in which  $n=0$ ,  $m=1$ ,  $R_5 = H$ ,  $R_3 = H$  and  $R_1 = CH_2CH_3$  and  $R_2 = (CH_2)_3CH_3$ ; or alternatively,  $n=1$ ,  $m=0$ ,  $R_4 = H$ ,  $R_3 = H$ , and  $R_1 = CH_2CH_3$  and  $R_2 = (CH_2)_3CH_3$  (which are outside the scope of instant Claim 1), as shown below:



Applicant submits that the compounds defined by formula (I) of Claim 1, particularly as amended, are not obvious in view of *Richard*. The compounds of subparagraphs (i), (ii), (iii), and (iv) of Claim 1 are sterically different from the compounds of *Richard* and exhibit surprisingly improved photostability properties. The cited reference does not provide the motivation to prepare the Applicant's compounds exhibiting such photostable properties. Thus, the withdrawal of the 35 U.S.C. §103(a) rejection of Claims 1-4 and 23 is believed to be in order and is earnestly solicited.

Rejections under 35 U.S.C. § 112, second paragraph

Because Claims 4 and 23 have been amended to include a period at the end of the claims, Applicant requests the withdrawal of the rejection under 35 U.S.C. §112, second paragraph.

**CONCLUSION**

From the foregoing, further and favorable action in the form of a Notice of Allowance is respectfully requested and such action is earnestly solicited. In the event that there are any questions concerning this amendment or the application in general, the Examiner is respectfully requested to telephone the undersigned so that prosecution of the application may be expedited.

Respectfully submitted,

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